

b.) Remarks

Claim 21 has been amended in order to recite the present invention with the specificity required by statute. Additionally, claims 22 is cancelled and claim 23 amended to maintain its dependence. The subject matter of the amendment may be found in the specification as filed at page 3, line 19. Accordingly, no new matter has been added.

All claims (claims 1, 3, 15, 16 and 21-27) are rejected under 35 USC §112, first paragraph, for lack of written description and enablement. In support of this, the Examiner states that the amendment (changing "WO-A- 97/19 086" to --WO-A-97/19086 (US Patent No. 6,831,076 issued December 14, 2004)-- is new matter and must be withdrawn.

This rejection is not well-understood since the amendment is in conformity with MPEP §608.01(p). Nonetheless, to complete the record and in conformity with the provisions therein, the undersigned hereby affirms that incorporation by reference of the US Patent contains no new matter and is the same as the PCT publication previously incorporated by reference.

The Examiner states the original disclosure fails to teach how derivatives are made or how Epothilones A and B are respectively de-epoxidized to Epothilones C and D and notes that WO-A-97/19086 was originally improperly incorporated by reference. In response, Applicants respectfully submit there was no need to incorporate the teachings of that patent since a plethora of methods for derivatization were well-known at the time this application was filed. (A specification need not teach, and preferably omits, what is well-known in the art. *Spectra-Physics v. Coherent*, 827 F2d 1524 (Fed. Cir. 1987).

Claims 21-26 are rejected under 35 USC §112, second paragraph since the Examiner objects to the "pseudohalogen". In response, that term has been changed to read "-NCO, -NCS or -N₃". The Examiner also states claim 22 is a duplicate of claim 1, and claim 26 is a duplicate of claim 23. In response claim 22 is cancelled and claim 23 amended to depend from claim 21.

Claims 1, 3, 15, 16 and 21-27 are all rejected under 35 USC §102(b) as being anticipated by DE 195 42 986.9 and DE 41 38 042.8, and under 35 USC §102(e) as being anticipated by U.S. Patents Nos. 5,969,145 or 6,043,372 to Schnizer. Applicants' review indicates DE 41 38 042.8 was published on May 22, 1997 and the Schnizer patents were first filed in the U.S. Patent and Trademark Office on September 26, 1996.

Solely in order to reduce the issues and expedite prosecution, the rejection over the DE 195 42 986.9 and Schinzer references is overcome by the enclosed Declaration of Gerhard Hoefle under Rule 131 evidencing Applicants' earlier reduction to practice of epothilone D on June 13, 1996 and epothilone C on June 20, 1996. Accordingly, DE 195 42 986.9 and U.S. Patents Nos. 5,969,145 and 6,043,372 are no longer available as prior art herein.

As to DE 41 38 042.8 Applicants respectfully wish to clarify that such only discloses epothilones A and B. Neither of these compounds are encompassed by any of the pending claims.

Claims 1, 3, 15, 16 and 21-27 also stand rejected under 35 USC §112, first paragraph, because the Examiner contends they are not "reasonably enabled" by the specification. At pages 2-4 of the Office Action the Examiner discusses *utility* (not

enablement) and notes incorrectly "the breath [sic] of the claims includes epothilones A-D and derivatives thereof, process of making, compositions and methods of use. The nature of the invention is using the compounds as pharmaceuticals." (Emphasis added.)

In response, Applicants respectfully wish to clarify that the pending claims do not encompass any "methods of use."

Additionally, Applicants bring to the Examiner's attention paragraphs 60, 61, 70 and 71 of the Hoefle Declaration, submitted herewith. As indicated in the Declaration, the original experiments leading to the production and isolation of epothilones C and D were not performed with the wild strain of Soce90 (DSM 6773), but with *Sorangium cellulosum* strains Soce1198, Soce1275, and Soce1294. Then, further experiments were performed with Soce90A3, a clone of the Soce90 wild strain (DSM 6773), which was known to be a good producer of epothilones A and B, and the data generated with Soce90A3 was used to prepare Example 1 of the subject application, including the reported generated yields of 0.3 g epothilones C and D. However, Example 1 of the subject application erroneously identifies DSM 6773 as the starting materials used to produce these epothilones, not Soce90A3, the starting material actually used, which is a mutant strain that was not made publicly available by deposit. Thus, in 2005, to establish that epothilones C and D can be obtained using the wild strain DSM 6773, further experiments were conducted. Specifically, DSM 6773 was newly obtained from DSMZ and cultured to produce epothilones, and epothilones C and D were obtained at quantities of 1.4 mg and 0.5 mg, respectively. Accordingly, it has been established that epothilones C and D can be obtained with DSM 6773.

In view of the above amendments and remarks, Applicants submit that all of the Examiner's concerns are now overcome and the claims are now in allowable condition. Accordingly, reconsideration and allowance of this application is earnestly solicited.

Claims 1, 3, 15, 16, 21 and 23-27 remain presented for continued prosecution.

Applicant's undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

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